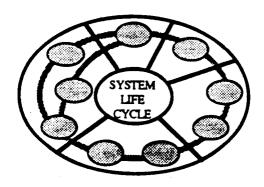
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE (OSWER)



SYSTEM LIFE CYCLE MANAGEMENT GUIDANCE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

AUG 5 1988

OFFICE OF

SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT:

OSWER's System Life Cycle Management Guidance

FROM:

Asa R. Frost, Jr., Director full

Information Management Staff (OS-110)

TO:

Addressees

OSWER Directive 9028.00 states that every information management project which supports the Agency's hazardous waste program must comply with OSWER's System Life Cycle Management Guidance. Copies of Parts 1 and 2 of this Guidance are now available in Room M2416 of Headquarters or by mail, by calling FTS 475-6760.

Key to the successful use of the Guidance is the project is management plan which documents the approach the project will take, the level of specificity of the activities and products required, and the level of reviews and approvals needed for projects throughout leir life cycle. In addition, there is a special emphasis on data anagement, requiring activities and products which demonstrate the importance of the link between systems and the program missions they support.

Part 1 of the Guidance gives management and the general work force an overview of the life cycle process. Part 2 contains technical guidance which provides a framework and basis for each of the stages of the life cycle.

Part 3 is reserved for Practice Papers which describe a particular topic in depth, reflecting changes in technology and organizational structure. A number of Practice Papers will be distributed shortly and should be kept in the LCM Guidance notebook. Topics include Data Management, Reviews and Approvals, and Life Cycle for Expert Systems.

In order to increase the understanding and use of the Guidance, a number of training courses are being planned. The one to three hour courses will focus on topics for specific audiences. The schedule will be announced shortly.

If you have any questions concerning the Guidance, the Practice Papers, or the training we are planning, please call me or Mary Lou elley at 382-5760.



DIRECTIVE NUMBER: 9028.00

TITLE: OSWER'S SYSTEM LIFE CYCLE MANAGEMENT GUIDANCE

APPROVAL DATE: July 29, 1988

EFFECTIVE DATE:

ORIGINATING OFFICE: OSWER/OPMT/IMS

色 FINAL

DRAFT

LEVEL OF DRAFT

☐ A — Signed by AA or DAA

☐ 8 — Signed by Office Director

C - Review & Comment

REFERENCE (other documents):

SWER OSWER OSWER DIRECTIVE DIRECTIVE DI



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



JUL 29 1988

DFF OF DF SOUD WASTE AND EMERGENCY RESPONS

MEMORANDUM

SUBJECT:

OSWER's Life Cycle Management Guidance for Information

Systems - Directive No. 9028.00

FROM:

J. Winston Porter

Assistant Administrator

TO:

OSWER Office Directors

Regional Waste Management Division Directors

This memorandum establishes the policy of the Office of Solid Waste and Emergency Response concerning OSWER's Life Cycle Management Guidance for information systems - OSWER Directive No. 9028.00.

Purpose of the Guidance

OSWER'S Life Cycle Management Guidance for information systems for provides a structured approach for the solution of information management problems, particularly those that require consideration of automated systems. It addresses the determination and accomplishment of the solution and, for automated systems, also addresses the ongoing management and support of the system.

The Guidance has two objectives:

To explain the importance, objectives, and benefits of information system life cycle management to all potential participants in the life cycle;

To describe the progression of the life cycle through individual phases and stages, in terms of their respective objectives, activities, decisions, and products, and to describe the relationships among the phases and stages.

This Guidance has been developed to address a wide range of information systems, including modeling and expert systems. Systems that support OSWER programs vary greatly in size, scope of application, complexity of processing, technologies used, and the methodologies and tools used to support the evolution of the system

from initial problem statement through the operation and ultimate termination of the system. Such variation reflects the diversity of OSWER programs. Thus, this Guidance does not prescribe a single method, or present a "cookbook" approach applicable without change to every system. Rather, it presents a structured, disciplined approach for solving problems, and for selecting and using the methods, tools, and techniques appropriate to each problem.

Policy

All information systems, which are intended for use by an CSWER organization or for use by a Regional office in support of an OSWER program, must be developed in compliance with OSWER's Life Cycle Management Guidance for information systems. This includes systems funded by the CSWER budget or funded by other EPA offices in support of OSWER. It also includes systems developed under OSWER mission support contracts, even those systems incidental to the major purpose of a contract.

The policy is effective from the date of this memorandum.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

DEC 29 1989

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT:

Part Three of OSWER's System Life Cycle

Management Guidance - Directive No. 9828.000

FROM:

Asa R. Frost Jr., Director

Information Management Staff

TO:

Addressees

OSWER Directive 9028.00 states that every information management project which supports the Agency's hazardous waste program must comply with OSWER's Information System Life Cycle Management Guidance. A Practice Paper on Benefit-Cost Analysis has been completed and is now being issued as an addition to the Directive, as No. 9028.00b. The Benefit-Cost Analysis Practice Paper is available in Room M2416 of Headquarters, or by mail by calling FTS 475-6760. In addition, the Practice Paper is being distributed to those who have already received Parts 1, 2 and 3 of the Guidance.

The Benefit-Cost Analysis Paper describes the benefit-cost analysis noted in Parts 1 and 2 of the Guidance, in the context of the OSWER program and information management environment. Topics addressed include lists of quantifiable and non-quantifiable benefits and costs, risk assessment of alternatives, comparison of alternatives and an explanation of net present value.

In general, the Guidance serves to promote better management of information activities by presenting a structured approach for solving problems and for selecting and using the methods, tools and technology appropriate to each project.

Parts 1 and 2 of the Guidance were distributed initially in 1988. Part 3 is reserved for Practice Papers which describe a particular topic in depth, reflecting changes in technology or organizational structures. Six Practice Papers were distributed in March 1989, covering topics such as project review and approval, data management, and expert systems.

If you have any questions concerning the Guidance, or the Practice Papers, please call me or Mary Lou Melley at FTS 475-6760.

Attachment

Addressees: (without Attachment)

OSWER Information Management Steering Committee Members
OSWER Division Directors
OSWER Program Management Staff Directors
OSWER Staff Directors, Office of Resource Management Staff
Headquarters SIRMOS
Inspector General
Assistant Regional Administrators
Regional SIRMOS
ORD Headquarters and Laboratory Managers
OSWER Contractors
OIRM Contractors

Addressees: (with Attachment)

OSWER Information Management Coordinators
OIRM Division Directors
National Data Processing Division Directors
Regional Waste Management Division Directors
Regional IRM Branch Chiefs
Individual recipients of OSWER's Life Cycle Management Guidance,
(Parts 1 and 2)





DIRECTIVE NUMBER: 9028,00b

TITLE: OSWER'S SYSTEM LIFE CYCLE MANAGEMENT GUIDANCE:
PART THREE - PRACTICE PAPER: BENEFIT-COST ANALYSIS

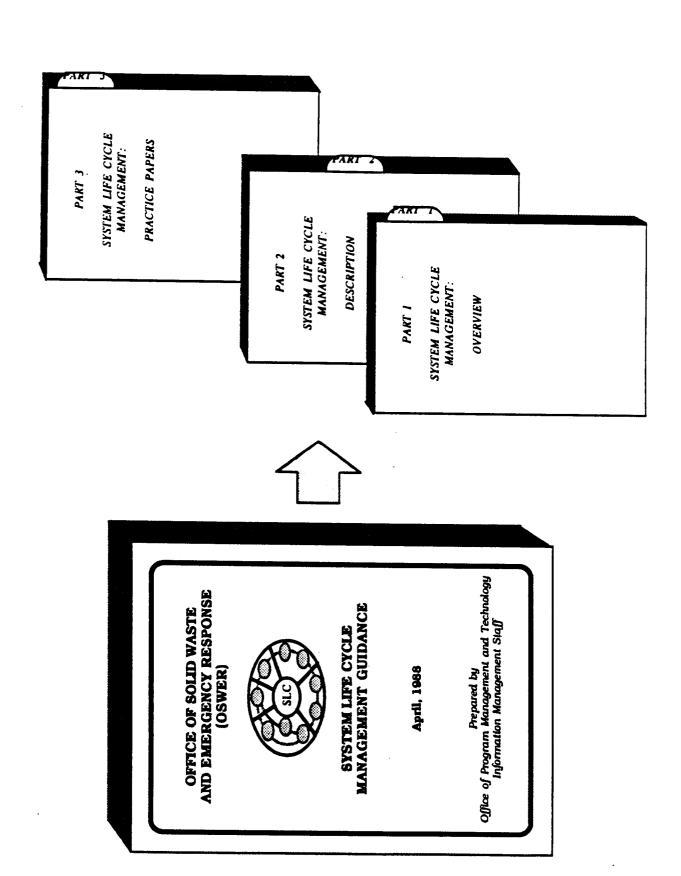
APPROVAL DATE:
EFFECTIVE DATE:
ORIGINATING OFFICE: OSWER/RMS/IMS

FINAL
DRAFT
LEVEL OF DRAFT

A — Signed by AA or DAA
B — Signed by Office Director
C — Review & Comment

REFERENCE (other documents):

WER OSWER OSWER DIRECTIVE DI



OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE SYSTEM LIFE CYCLE MANAGEMENT GUIDANCE

TABLE OF CONTENTS

| Part 1: Overview | Page |
|--------------------------------------|------|
| 1. Introduction | 1-1 |
| 2. Overview of the System Life Cycle | 2-1 |
| 3. Key Principles | 3-1 |
| Appendix A | A-1 |
| Part 2: Description | |
| 1. Phase I: Initiation | 1-1 |
| 2. Phase II: Concept | 2-1 |
| 3. Stage III-A: Definition | 3-1 |
| 4. Stage III-B: Design | 4-1 |
| 5. Stage IV-A: Development | 5-1 |
| 6. Stage IV-B: Implementation | 6-1 |
| 7. Stage V-A: Production | 7-1 |
| 8. Stage V-B: Evaluation | 8-1 |
| 9. Stage V-C: Archive | 9-1 |
| 10. Crosscutting Considerations | 10-1 |
| Appendix A: Glossary | A-1 |
| Appendix B: Product Outlines | B-1 |
| Part 3: Practice Papers | |

System Life Cycle Reviews and Approvals

Project Management Plan

Data Management Plan

Project Participation

Configuration Management